

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-10 (Canceled).

11. (New) A method of supervising the execution of one or more program sections written in an object-oriented programming language, comprising:

- (a) starting a program section and creating an object as an instance of a class;
- (b) storing in a memory one or more information units associated with the created object and an expiration time period associated with the stored one or more information units;
- (c) terminating the program section;
- (d) removing the one or more information units stored in the memory when the created object is completed or inactive;
- (e) scanning the memory to identify one or more information units having been stored in the memory for a time period longer than the expiration time period; and
- (f) the identified information unit or units in step (e) triggering an alarm signal.

12. (New) The method according to claim 11, wherein step (b) further comprises recording a starting time of the expiration time period.

13. (New) The method according to claim 11, further comprising:
determining if the created object is active or inactive.

14. (New) The method according to claim 13, further comprising:

delaying step (d) after lapse of the expiration time period if the created object is active.

15. (New) The method according to claim 11, wherein step (f) further comprises:
determining whether the created object is active;
the one or more information units triggering the alarm signal when the created object is inactive, and
the one or more information units delaying the triggering of the alarm signal when the created object is active.

16. (New) The method according to claim 11, further comprising:
identifying one or more information units in the memory that have been stored longer than the expiration time period.

17. (New) The method according to claim 16, further comprising:
generating a notification message when one or more information units have been identified.

18. (New) The method according to claim 11, further comprising:
maintaining statistical information about a number of instances in each class.

19. (New) The method according to claim 18, further comprising:
generating a message when a usage volume exceeds a predetermined level.

20. (New) A method of supervising the execution of one or more program sections written in an object-oriented programming language, comprising:
(a) starting a program section and creating an object;

(b) storing one or more information units identifying the created object in a memory;

(c) terminating the program section;

(d) removing one or more information units stored in the memory when the created object is completed or inactive;

(e) scanning the memory to identify one or more information units having been stored in the memory for a time period longer than a predetermined time period; and

(f) sending an alarm signal for each information unit identified in step (e) when the created object is inactive.

21. (New) The method in claim 20, further comprising:

(g) delaying a transmission of the alarm signal for each information unit identified in step (e) when the created object is active.

22. (New) Apparatus for supervising the execution of one or more program sections written in an object-oriented programming language, comprising:

electronic circuitry configured to start a program section and creating an object as an instance of a class; and

a memory for storing one or more information units associated with the created object and an expiration time period associated with the stored one or more information units,

the electronic circuitry further configured to:

terminate the program section;

remove the one or more information units stored in the memory unit when the created object is completed or inactive;

scan the memory to identify one or more information units having been stored in the memory for a time period longer than the expiration time period; and trigger an alarm signal in response to the identified information unit or units.

23. (New) The apparatus according to claim 22, wherein the electronic circuitry is further configured to record a starting time of the expiration time period.

24. (New) The apparatus according to claim 22, wherein the electronic circuitry is further configured to determine if the created object is active or inactive.

25. (New) The apparatus according to claim 24, wherein the electronic circuitry is further configured to delay termination of the program section after lapse of the expiration time period if the created object is active.

26. (New) The apparatus according to claim 22, wherein the electronic circuitry is further configured to:

determine whether the created object is active;
trigger the alarm signal when the created object is inactive, and
delay the triggering of the alarm signal when the created object is active.

27. (New) The apparatus according to claim 22, wherein the electronic circuitry is further configured to:

identify one or more information units in the memory that have been stored longer than the expiration time period.

28. The apparatus according to claim 27, wherein the electronic circuitry is further configured to:

generate a notification message when one or more information units have been identified.

29. (New) The apparatus according to claim 22, wherein the electronic circuitry is further configured to:

maintain statistical information about a number of instances in each class.

30. (New) The apparatus according to claim 27, wherein the electronic circuitry is further configured to:

generate a message when a usage volume exceeds a predetermined level.

31. (New) An apparatus for supervising the execution of one or more program sections written in an object-oriented programming language, comprising:

electronic circuitry configured to start a program section and creating an object as an instance of a class; and

a memory for storing one or more information units identifying the created object; the electronic circuitry further configured to:

terminate the program section;

remove one or more information units stored in the memory when the created object is completed or inactive;

scan the memory to identify one or more information units having been stored in the memory for a time period longer than a predetermined time period; and send an alarm signal in response to the identified information unit or units.

32. (New) The apparatus in claim 31, wherein the electronic circuitry is further configured to send the alarm signal only when the one or more information units have been stored in the memory for a time period longer than a predetermined time period and the created object is inactive.

33. (New) The apparatus in claim 31, wherein the electronic circuitry is further configured to delay sending the alarm signal when the created object is active.